CCP43 — RELATIONAL DATABASE MANAGEMENT SYSTEM

Time : Three hours   Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define DBMS.

2. What is entity set?

3. Why relational algebra used in DBMS?

4. What is integrity and security?

5. Define normalization.

6. What is query? Give an example.

7. What is RAID?

8. Expand PL/SQL.

9. What is concurrency control?

10. What is recovery system?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) What are the features of ER diagram?

Or

(b) What is the difference between ER diagram and database diagram?

12. (a) Explain the types of embedded SQL.

Or

(b) How to write a function in SQL.

13. (a) Explain data independence and its types.

Or

(b) Define functional and transitive dependency.

14. (a) Explain the structure of hard disk.

Or

(b) What are different characteristics of relations?

15. (a) What are the three main problem in concurrency control?

Or

(b) Explain the four types of dead lock.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the five layers of the database architecture.

17. Describe the structure of a database model.

18. Explain Codd's 12 rules of relational model.

19. Point out the advantage and disadvantage of indexed – sequential file organisation.

20. Explain the different types of lock.

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